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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,705	09/27/2000	Gerhard Reichert	1663-L	6878

7590 09/24/2002

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EXAMINER

GOFF II, JOHN L

ART UNIT

PAPER NUMBER

1733

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DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/670,705	Applicant(s) REICHERT, GERHARD	
	Examiner John L. Goff	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2002 (Amendment A).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Amendment A filed on 7/23/02. All previous objections to the claims have been overcome. In response to applicant's amendment the previous 35 U.S.C. 102 rejection using Hodek et al. is withdrawn in favor of Battersby, and the previous 35 U.S.C. 103 rejections using Hodek et al. in view of Schlienkamp and Hodek et al. in view of Battersby are withdrawn in favor of Battersby in view of Hodek et al. and Battersby in view of Schlienkamp.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5-7, 9, 11, 13, 16, 18, 19, 21, 23-27, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Battersby (3,759,771).

Battersby is directed to a method of making an insulating glazing unit (double glazing unit) (Column 1, lines 54-63). Battersby teaches providing a pair of glazing sheets separated by a spacer wherein the spacer (free of sealant) is spaced inwardly from the perimeter of the sheets forming an outwardly facing channel and an inward insulating channel (Figures 1 and 5-7 and Column 2, lines 24-29 and 57-60). Battersby teaches sealing the insulating chamber by simultaneously applying a first and second sealant into the provided outwardly facing channel. The sealants are applied through an applicator with two heads wherein the second applicator head trails the first, thus the second sealant covers the first (Figures 2-4 and Column 2, lines 63-

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71 and Column 3, lines 1-2 and 11-17 and 40-45). Battersby teaches that the first and second sealants may be different (Column 4, lines 16-23), and the sealants comprise a wide variety of materials including polyisobutylene, polyurethane, and thermosets (Column 3, lines 62-63 and Column 4, lines 7 and 12-13). Battersby teaches that the sealants prevent the entry of dust and/or moisture into the insulating chamber (Column 2, lines 30-34). Battersby further teaches that the spacer may be formed of metal, plastics, or wood and may include a desiccant (Column 2, lines 40-44), and the spacer may have notched corners between the glazing sheets and the spacer with the first sealant applied in the notched corners (Figures 2-6 and Column 2, lines 45-56).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 2-4, 8, 10, 12, 20, 22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battersby as applied above in paragraph 3, and further in view of Hodek et al. (U.S. Patent 5,655,282).

As shown above, Battersby teaches all of the limitations in claims 2-4, 8, 10, 12, 20, 22, and 28 except for a teaching on using a foam spacer and a teaching on using hot melt butyl sealant, low permeable sealant, and structural sealant. Hodek et al. are directed to an insulating glazing unit. Hodek et al. teach a pair of glass sheets separated by a spacer wherein the spacer is located inward from the perimeter of the glass sheets forming an outwardly-facing channel and an inward, insulating chamber (Figure 10 and Column 3, lines 21-29 and Column 7, lines 60-63). Hodek et al. teach first (154 of Figure 10) and second (155 of Figure 10) sealants applied to the

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spacer and glass sheets to provide a moisture barrier (Column 7, lines 63-66 and Column 8, lines 24-28). The first sealant may comprise a butyl adhesive (Column 11, line 31) including polyisobutylene (Column 11, lines 40-41), or a low permeable sealant (Column 8, lines 16-20). The second sealant may comprise a structural sealant made of a thermoset such as silicone (Column 8, lines 24-28). Hodek et al. further teach that it is well known in the art to use both foam and metal spacers carrying a desiccant (Column 4, lines 37-41 and 66-67), and it is known to use a spacer with a pair of notched corners (Figure 1).

Regarding claims 2-4, as shown above Hodek et al. teach that it was known to use a foam spacer carrying a desiccant, and one of ordinary skill in the art at the time the invention was made reading Battersby in view of Hodek et al. would have readily appreciated using in the method of Battersby a foam spacer as suggested by Hodek et al. as only the expected results would be achieved.

Regarding claims 8, 10, 12, 20, 22, and 28, as shown above Hodek et al. teach sealants comprising butyl adhesive, low permeable sealant, and structural sealant applied to the spacer and glass sheets, and absent any unexpected results one of ordinary skill in the art at the time the invention was made reading Battersby in view of Hodek et al. would have readily appreciated using in the method of Battersby sealants comprising butyl adhesive, low permeable sealant, and structural sealant as suggested by Hodek et al.

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battersby as applied above in paragraph 3, and further in view of Schlienkamp (U.S. Patent 4,519,962).

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As shown above, Battersby teaches all of the limitations in claims 14 and 15 except for a teaching on applying the first sealant to the entire perimeter of the outwardly facing channel before applying the second sealant. Schlienkamp teaches a method and system for sealing the edges of insulating-glass panels. The sealing method of Schlienkamp is a continuous process wherein a glass pane is conveyed to a sealing station (Column 3, lines 23-27). A sealing nozzle then applies adhesive to the entire perimeter of the glass pane (Column 3, lines 42-44). It would have been within the purview of one of ordinary skill in the art at the time the invention was made to modify Battersby to completely apply the first sealant prior to further processing as suggested by Schlienkamp as only the expected results would be achieved.

Regarding claim 15, Schlienkamp is silent on the application of a second sealant. However, as shown above Battersby teaches applying a second sealant to the outwardly facing channel, and absent any unexpected results it would have been obvious to one of ordinary skill in the art at the time the invention was made to use multiple sealing stations with one station applying the first sealant followed by a second station applying the second sealant.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Battersby.

As shown above, Battersby teaches all of the limitations in claim 17 except for a teaching on retracting the applicator nozzle that applies the first sealant. It is noted that in the method and apparatus of Battersby a retractable applicator nozzle is not necessary. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a retractable first nozzle if the nozzle would disturb the application of the second sealant.

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Response to Arguments

8. Applicant's arguments filed 7/23/02 have been fully considered but they are not persuasive. Applicant argues that Hodek et al. does not teach the use of primary and secondary sealants and that Hodek et al. does not teach applying the primary sealant after forming the outwardly facing channel. The examiner notes Hodek et al. does teach the use of primary (154 of Figure 10) and secondary (155 of Figure 10) sealants as shown in Figure 10 and Column 7, lines 63-68 and Column 8, lines 24-28. Further, the primary and secondary sealants taught by Hodek et al. comprise the same materials as applicant's primary and secondary sealants (Column 8, lines 16-20 and 24-28). The examiner agrees that Hodek et al. does not teach applying the primary sealant after forming the outwardly facing channel. However, it is known in the art to do so as shown by Battersby (previously cited).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John L. Goff

John L. Goff
September 20, 2002

Michael W. Ball
Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700